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What I claim as my invention is:

1. An aircraft with a main body, a primary lifting mechanism and a secondary lifting mechanism, which main body has a forward end and an aft end, with the primary lifting mechanism and the secondary lifting mechanism connected to the main body of the aircraft in tandem order, and with the aircraft able to achieve flight by means of upward forces exerted on the main body of the aircraft by the primary lifting mechanism and the secondary lifting mechanism while the primary lifting mechanism and the secondary lifting mechanism are connected to the main body of the aircraft in tandem order,
and which primary lifting mechanism comprises a power plant as a means for providing downwardly extending thrust to the aircraft, and which secondary lifting mechanism comprises a power plant as a means for providing downwardly extending thrust to the aircraft, and which primary lifting mechanism is connected to the main body of the aircraft by a tilt enabling joint such that during flight of the aircraft the primary lifting mechanism can be tilted in a plurality of directions and angles relative to the main body of the aircraft, in a controlled manner, and such that the primary lifting mechanism can be tilted in forward, rearward and lateral directions relative to the main body of the aircraft during flight of the aircraft, in a controlled manner, and such that a direction of

travel of the aircraft during flight can be altered by
altering the lateral direction or angle of tilt of the primary
lifting mechanism relative to the main body of the aircraft,
and which said tilt enabling joint is a primary tilt enabling
5 joint, with the primary lifting mechanism able to exert an
upward force on the forward end of the main body of the
aircraft through the primary tilt enabling joint, and which
secondary lifting mechanism is connected to the main body of
the aircraft by an additional tilt enabling joint, which said
10 additional tilt enabling joint is a secondary tilt enabling
joint, and which said secondary lifting mechanism is
connected to the main body of the aircraft by the secondary
tilt enabling joint such that during flight of the aircraft
the secondary lifting mechanism can be tilted in a plurality
15 of directions and angles relative to the main body of the
aircraft, in a controlled manner, and such that the secondary
lifting mechanism can be tilted in forward, rearward and
lateral directions relative to the main body during flight
of the aircraft, in a controlled manner, and
20 such that a direction of travel of the aircraft during
flight can be altered by altering the lateral direction or
angle of tilt of the secondary lifting mechanism relative
to the main body, and which secondary tilt enabling joint is
such that the secondary lifting mechanism can be tilted in a
25 controlled manner in a lateral direction with respect to the
main body of the aircraft during flight of the aircraft that

is opposite to a lateral direction that the primary lifting mechanism can be tilted in with respect to the main body of the aircraft by means of the primary tilt enabling joint during flight of the aircraft, and which secondary lifting mechanism is able to exert an upward force on the aft end of the main body of the aircraft through the secondary tilt enabling joint, with the primary tilt enabling joint and the secondary tilt enabling joint connected to the main body of the aircraft, and with the aircraft able to achieve flight by means of an upward force exerted on the main body of the aircraft by the primary lifting mechanism extending thrust in a downward direction and an upward force exerted on the main body of the aircraft by the secondary lifting mechanism extending thrust in a downward direction while the primary lifting mechanism and the secondary lifting mechanism are maintained in tandem order, and with controlled lateral tilting of the primary lifting mechanism and the secondary lifting mechanism able to occur during flight while the primary lifting mechanism and the secondary lifting mechanism are maintained in tandem order.

2. An aircraft with a main body, a primary lifting mechanism and a secondary lifting mechanism, which main body has a forward end and an aft end, with the primary lifting mechanism and the secondary lifting mechanism connected to the main body of the aircraft in tandem order, and with the aircraft able to achieve flight by means of upward forces exerted on the main body of the aircraft by the primary lifting mechanism and the secondary lifting mechanism while the primary lifting mechanism and the secondary lifting mechanism are connected to the main body of the aircraft in tandem order,
- and which primary lifting mechanism comprises a rotor, an engine assembly, and a plurality of blades, with the said blades connected to the rotor, and which said engine assembly is able to rotate the said rotor, with the blades connected to the rotor such that when the rotor is rotated by the said engine assembly air can be forced in a downward direction by means of the blades rotating around the rotor, with the primary lifting mechanism able to exert an upward force on the forward end of the main body of the aircraft by forcing air in a downward direction by way of the blades rotating around the rotor,
- and the secondary lifting mechanism comprises a rotor, an engine assembly, and a plurality of

blades, with the blades of the secondary lifting
mechanism connected to the rotor of the secondary
lifting mechanism, and which engine assembly of
the secondary lifting mechanism is able to rotate
5 the rotor of the secondary lifting mechanism,
with the blades of the secondary lifting mechanism
connected to the rotor of the secondary lifting
mechanism such that when the rotor of the secondary
lifting mechanism is rotated by the engine assembly
10 of the secondary lifting mechanism air can be forced
in a downward direction by means of the blades of the
secondary lifting mechanism rotating around the rotor
of the secondary lifting mechanism, with the secondary
lifting mechanism able to exert an upward force on
15 the aft end of the main body of the aircraft by
forcing air in a downward direction by way of the
blades of the secondary lifting mechanism rotating
around the rotor of the secondary lifting mechanism,
and which primary lifting mechanism is connected to the
20 main body of the aircraft by a tilt enabling joint such that
during flight of the aircraft the primary lifting mechanism
can be tilted in a plurality of directions and angles relative
to the main body of the aircraft, in a controlled manner, and
such that the primary lifting mechanism can be tilted in
25 forward, rearward and lateral directions relative to the main
body of the aircraft

during flight of the aircraft, in a controlled manner,
and such that a direction of
travel of the aircraft during flight can be altered by
altering the lateral direction or angle of tilt of the primary
5 lifting mechanism relative to the main body of the aircraft,
and which said tilt enabling joint is a primary tilt enabling
joint, with the primary lifting mechanism able to exert an
upward force on the forward end of the main body of the
aircraft through the primary tilt enabling joint, and which
10 secondary lifting mechanism is connected to the main body of
the aircraft by an additional tilt enabling joint, which said
additional tilt enabling joint is a secondary tilt enabling
joint, and which said secondary lifting mechanism is
connected to the main body of the aircraft by the secondary
15 tilt enabling joint such that during flight of the aircraft
the secondary lifting mechanism can be tilted in a plurality
of directions and angles relative to the main body of the
aircraft, in a controlled manner, and such that the secondary
lifting mechanism can be tilted in forward, rearward and
20 lateral directions relative to the main body during flight
of the aircraft, in a controlled manner, and
such that a direction of travel of the aircraft during
flight can be altered by altering the lateral direction or
angle of tilt of the secondary lifting mechanism relative
25 to the main body, and which secondary tilt enabling joint is
such that the secondary lifting mechanism can be tilted in a
controlled manner in a lateral direction with respect to the

main body of the aircraft during flight of the aircraft that is opposite to a lateral direction that the primary lifting mechanism can be tilted in with respect to the main body of the aircraft by means of the primary tilt enabling joint

5 during flight of the aircraft, and which secondary lifting mechanism is able to exert an upward force on the aft end of the main body of the aircraft through the secondary tilt enabling joint, with the primary tilt enabling joint and the secondary tilt enabling joint connected to the main body of

10 the aircraft, and with the aircraft able to achieve flight by means of an upward force exerted on the main body of the aircraft by the primary lifting mechanism forcing air in a downward direction and an upward force exerted on the main body of the aircraft by the secondary lifting mechanism

15 forcing air in a downward direction while the primary lifting mechanism and the secondary lifting mechanism are maintained in tandem order, and with controlled lateral tilting of the primary lifting mechanism and the secondary lifting mechanism able to occur during flight while the

20 primary lifting mechanism and the secondary lifting mechanism are maintained in tandem order.

3. An aircraft with a main body, a primary lifting mechanism and
a secondary lifting mechanism, which main body has a forward
end and an aft end, with the primary lifting mechanism and
the secondary lifting mechanism connected to the main body
5 of the aircraft in tandem order, and with the aircraft able
to achieve flight by means of upward forces exerted on the
main body of the aircraft by the primary lifting mechanism
and the secondary lifting mechanism while the primary lifting
mechanism and the secondary lifting mechanism are connected
10 to the main body of the aircraft in tandem order,
and which primary lifting mechanism is connected to the
main body of the aircraft by a tilt enabling joint such that
during flight of the aircraft the primary lifting mechanism
can be tilted in a plurality of directions and angles relative
15 to the main body of the aircraft, in a controlled manner, and
such that the primary lifting mechanism can be tilted in
forward, rearward and lateral directions relative to the
main body of the aircraft during flight of the aircraft,
in a controlled manner, and such that a direction of
20 travel of the aircraft during flight can be altered by
altering the lateral direction or angle of tilt of the primary
lifting mechanism relative to the main body of the aircraft,
and which said tilt enabling joint is a primary tilt enabling
joint,

which primary lifting
mechanism is a turboprop, and which primary lifting
mechanism is attached to the primary tilt enabling joint
such that air can be forced in a downward direction
5 by the primary lifting mechanism, and such that by forcing
air in a downward direction the primary lifting mechanism is
able to exert an upward force on the forward end of the
main body of the aircraft, with the primary lifting mechanism
able to exert an upward force on the forward end of the main
10 body of the aircraft through the primary tilt enabling joint,
and which secondary lifting mechanism is connected to the
main body of the aircraft by an additional tilt enabling joint,
which said additional tilt enabling joint is a secondary tilt
enabling joint, and which said secondary lifting mechanism is
15 connected to the main body of the aircraft by the secondary
tilt enabling joint such that during flight of the aircraft
the secondary lifting mechanism can be tilted in a plurality
of directions and angles relative to the main body of the
aircraft, in a controlled manner, and such that the secondary
20 lifting mechanism can be tilted in forward, rearward and
lateral directions relative to the main body during flight
of the aircraft, in a controlled manner, and
such that a direction of travel of the aircraft during
flight can be altered by altering the lateral direction or
25 angle of tilt of the secondary lifting mechanism relative
to the main body, and which secondary tilt enabling joint is

such that the secondary lifting mechanism can be tilted in a controlled manner in a lateral direction with respect to the main body of the aircraft during flight of the aircraft that is opposite to a lateral direction that the primary lifting
5 mechanism can be tilted in with respect to the main body of the aircraft by means of the primary tilt enabling joint during flight of the aircraft,

and the secondary
lifting mechanism is a turboprop, which secondary lifting
10 mechanism is attached to the secondary tilt enabling joint such that air can be forced in a downward direction by the secondary lifting mechanism, and such that by forcing air in a downward direction the secondary lifting mechanism is able to exert an upward force on the aft end of the
15 main body of the aircraft, and which secondary lifting mechanism is able to exert an upward force on the aft end of the main body of the aircraft through the secondary tilt enabling joint,

with the primary tilt enabling joint and the
20 secondary tilt enabling joint connected to the main body of the aircraft, and with the aircraft able to achieve flight by means of an upward force exerted on the main body of the aircraft by the primary lifting mechanism forcing air in a downward direction and an upward force exerted on the main
25 body of the aircraft by the secondary lifting mechanism

- forcing air in a downward direction while the primary lifting mechanism and the secondary lifting mechanism are maintained in tandem order, and with controlled lateral tilting of the primary lifting mechanism and the secondary lifting mechanism able to occur during flight while the primary lifting mechanism and the secondary lifting mechanism are maintained in tandem order.
4. An aircraft with a main body, a primary lifting mechanism and a secondary lifting mechanism, which main body has a forward end and an aft end, with the primary lifting mechanism and the secondary lifting mechanism connected to the main body of the aircraft in tandem order, and with the aircraft able to achieve flight by means of upward forces exerted on the main body of the aircraft by the primary lifting mechanism and the secondary lifting mechanism while the primary lifting mechanism and the secondary lifting mechanism are connected to the main body of the aircraft in tandem order, and which primary lifting mechanism comprises a rotor, an engine assembly, and a plurality of blades, with the said blades connected to the rotor, and which said engine assembly is able to rotate the said rotor, with the blades connected to the rotor such that when the rotor is rotated by the said engine assembly air can be forced in a

downward direction by means of the blades rotating
around the rotor, with the primary lifting mechanism
able to exert an upward force on the forward end of
the main body of the aircraft by forcing air in a
5 downward direction by way of the blades rotating
around the rotor,

and which primary lifting mechanism is connected to the
main body of the aircraft by a tilt enabling joint such that
during flight of the aircraft the primary lifting mechanism
10 can be tilted in a plurality of directions and angles relative
to the main body of the aircraft, in a controlled manner, and
such that the primary lifting mechanism can be tilted in
forward, rearward and lateral directions relative to the
main body of the aircraft during flight of the aircraft,
15 in a controlled manner, and such that a direction of
travel of the aircraft during flight can be altered by
altering the lateral direction or angle of tilt of the primary
lifting mechanism relative to the main body of the aircraft,
and which said tilt enabling joint is a primary tilt enabling
20 joint, with the primary lifting mechanism able to exert an
upward force on the forward end of the main body of the
aircraft through the primary tilt enabling joint, and which
secondary lifting mechanism is connected to the main body of
the aircraft by an additional tilt enabling joint, which said
25 additional tilt enabling joint is a secondary tilt enabling
joint, and which said secondary lifting mechanism is

connected to the main body of the aircraft by the secondary tilt enabling joint such that during flight of the aircraft the secondary lifting mechanism can be tilted in a plurality of directions and angles relative to the main body of the aircraft, in a controlled manner, and such that the secondary lifting mechanism can be tilted in forward, rearward and lateral directions relative to the main body during flight of the aircraft, in a controlled manner, and such that a direction of travel of the aircraft during flight can be altered by altering the lateral direction or angle of tilt of the secondary lifting mechanism relative to the main body, and which secondary tilt enabling joint is such that the secondary lifting mechanism can be tilted in a controlled manner in a lateral direction with respect to the main body of the aircraft during flight of the aircraft that is opposite to a lateral direction that the primary lifting mechanism can be tilted in with respect to the main body of the aircraft by means of the primary tilt enabling joint during flight of the aircraft,

and the secondary lifting mechanism comprises at least one jet engine, which said at least one jet engine is attached to the secondary tilt enabling joint such that the said at least one jet engine is able to force exhaust gases to travel in a downward direction and such that by forcing exhaust gases to travel in a downward direction the said at least one jet engine can

exert an upward force on the aft end of the main body,
and which secondary lifting mechanism is able to exert
an upward force on the aft end of the main body of the
aircraft through the secondary tilt enabling joint,
5 with the primary tilt enabling joint and the
secondary tilt enabling joint connected to the main body of
the aircraft, and with the aircraft able to achieve flight
by means of an upward force exerted on the main body of the
aircraft by the primary lifting mechanism forcing air in a
10 downward direction and an upward force exerted on the main
body of the aircraft by the secondary lifting mechanism forcing
exhaust gases to travel in a downward direction while the
primary lifting mechanism and the secondary lifting mechanism
are maintained in tandem order, and with controlled lateral
15 tilting of the primary lifting mechanism and the secondary
lifting mechanism able to occur during flight while the
primary lifting mechanism and the secondary lifting
mechanism are maintained in tandem order.

5. The aircraft of claim 4 wherein the said at least one
20 jet engine is a turbojet.

6. The aircraft of claim 4 wherein the said at least one
jet engine is a turbofan.

7. An aircraft with a main body, a primary lifting mechanism and
a secondary lifting mechanism, which main body has a forward
end and an aft end, with the primary lifting mechanism and
the secondary lifting mechanism connected to the main body
5 of the aircraft in tandem order, and with the aircraft able
to achieve flight by means of upward forces exerted on the
main body of the aircraft by the primary lifting mechanism
and the secondary lifting mechanism while the primary lifting
mechanism and the secondary lifting mechanism are connected
10 to the main body of the aircraft in tandem order,
and which primary lifting mechanism is connected to the
main body of the aircraft by a tilt enabling joint such that
during flight of the aircraft the primary lifting mechanism
can be tilted in a plurality of directions and angles relative
15 to the main body of the aircraft, in a controlled manner, and
such that the primary lifting mechanism can be tilted in
forward, rearward and lateral directions relative to the
main body of the aircraft during flight of the aircraft,
in a controlled manner, and such that a direction of
20 travel of the aircraft during flight can be altered by
altering the lateral direction or angle of tilt of the primary
lifting mechanism relative to the main body of the aircraft,
and which said tilt enabling joint is a primary tilt enabling
joint, with the primary lifting mechanism able to exert an
25 upward force on the forward end of the main body of the
aircraft through the primary tilt enabling joint, and which

secondary lifting mechanism is connected to the main body of the aircraft by an additional tilt enabling joint, which said additional tilt enabling joint is a secondary tilt enabling joint, and which said secondary lifting mechanism is

5 connected to the main body of the aircraft by the secondary tilt enabling joint such that during flight of the aircraft the secondary lifting mechanism can be tilted in a plurality of directions and angles relative to the main body of the aircraft, in a controlled manner, and such that the secondary

10 lifting mechanism can be tilted in forward, rearward and lateral directions relative to the main body during flight of the aircraft, in a controlled manner, and such that a direction of travel of the aircraft during flight can be altered by altering the lateral direction or

15 angle of tilt of the secondary lifting mechanism relative to the main body, and which secondary tilt enabling joint is such that the secondary lifting mechanism can be tilted in a controlled manner in a lateral direction with respect to the main body of the aircraft during flight of the aircraft that

20 is opposite to a lateral direction that the primary lifting mechanism can be tilted in with respect to the main body of the aircraft by means of the primary tilt enabling joint during flight of the aircraft, and which secondary lifting mechanism is able to exert an upward force on the aft end

25 of the main body of the aircraft through the secondary tilt enabling joint, with the primary tilt enabling joint and the

secondary tilt enabling joint connected to the main body of the aircraft, and with the aircraft able to achieve flight by means of an upward force exerted on the main body of the aircraft by the primary lifting mechanism through the primary tilt enabling joint and an upward force exerted on the main body of the aircraft by the secondary lifting mechanism through the secondary tilt enabling joint while the primary lifting mechanism and the secondary lifting mechanism are maintained in tandem order, and with controlled lateral tilting of the primary lifting mechanism and the secondary lifting mechanism able to occur during flight while the primary lifting mechanism and the secondary lifting mechanism are maintained in tandem order.

8. An aircraft with a main body, a primary lifting mechanism and a secondary lifting mechanism, which main body has a forward end and an aft end, with the primary lifting mechanism and the secondary lifting mechanism connected to the main body of the aircraft in tandem order, and with the aircraft able to achieve flight by means of upward forces exerted on the main body of the aircraft by the primary lifting mechanism and the secondary lifting mechanism while the primary lifting mechanism and the secondary lifting mechanism are connected to the main body of the aircraft in tandem order,
- and which primary lifting mechanism is connected to the main body of the aircraft by a tilt enabling joint such that during flight of the aircraft the primary lifting mechanism can be tilted in a plurality of directions and angles relative to the main body of the aircraft, in a controlled manner, and such that the primary lifting mechanism can be tilted in forward, rearward and lateral directions relative to the main body of the aircraft during flight of the aircraft, in a controlled manner, and such that a direction of travel of the aircraft during flight can be altered by altering the lateral direction or angle of tilt of the primary lifting mechanism relative to the main body of the aircraft, and which said tilt enabling joint is a primary tilt enabling joint,
- which primary lifting mechanism is a turboprop, and which primary lifting

mechanism is attached to the primary tilt enabling joint such that air can be forced in a downward direction by the primary lifting mechanism, and such that by forcing air in a downward direction the primary lifting mechanism is able to exert an upward force on the forward end of the main body of the aircraft, with the primary lifting mechanism able to exert an upward force on the forward end of the main body of the aircraft through the primary tilt enabling joint,

and which secondary lifting mechanism is connected to the main body of the aircraft by an additional tilt enabling joint, which said additional tilt enabling joint is a secondary tilt enabling joint, and which said secondary lifting mechanism is connected to the main body of the aircraft by the secondary tilt enabling joint such that during flight of the aircraft the secondary lifting mechanism can be tilted in a plurality of directions and angles relative to the main body of the aircraft, in a controlled manner, and such that the secondary lifting mechanism can be tilted in forward, rearward and lateral directions relative to the main body during flight of the aircraft, in a controlled manner, and such that a direction of travel of the aircraft during flight can be altered by altering the lateral direction or angle of tilt of the secondary lifting mechanism relative to the main body, and which secondary tilt enabling joint is

such that the secondary lifting mechanism can be tilted in a controlled manner in a lateral direction with respect to the main body of the aircraft during flight of the aircraft that is opposite to a lateral direction that the primary lifting mechanism can be tilted in with respect to the main body of the aircraft by means of the primary tilt enabling joint during flight of the aircraft,

and the secondary lifting mechanism comprises at least one jet engine, which said at least one jet engine is attached to the secondary tilt enabling joint such that the said at least one jet engine is able to force exhaust gases to travel in a downward direction and such that by forcing exhaust gases to travel in a downward direction the said at least one jet engine can exert an upward force on the aft end of the main body, and which secondary lifting mechanism is able to exert an upward force on the aft end of the main body of the aircraft through the secondary tilt enabling joint, with the primary tilt enabling joint and the secondary tilt enabling joint connected to the main body of the aircraft, and with the aircraft able to achieve flight by means of an upward force exerted on the main body of the aircraft by the primary lifting mechanism forcing air in a downward direction and an upward force exerted on the main body of the aircraft by the secondary lifting mechanism

forcing exhaust gases to travel in a downward direction while the primary lifting mechanism and the secondary lifting mechanism are maintained in tandem order, and with controlled lateral tilting of the primary lifting mechanism and the secondary lifting mechanism able to occur during flight while the primary lifting mechanism and the secondary lifting mechanism are maintained in tandem order.

9. The aircraft of claim 8 wherein the said at least one jet engine is a turbojet.
- 10 10. The aircraft of claim 8 wherein the said at least one jet engine is a turbofan.
11. An aircraft with a main body, a primary lifting mechanism and a secondary lifting mechanism, which main body has a forward end and an aft end, with the primary lifting mechanism and the secondary lifting mechanism connected to the main body of the aircraft in tandem order, and with the aircraft able to achieve flight by means of upward forces exerted on the main body of the aircraft by the primary lifting mechanism and the secondary lifting mechanism while the primary lifting mechanism and the secondary lifting mechanism are connected to the main body of the aircraft in tandem order, and which primary lifting mechanism comprises a rotor, an engine assembly, and a

plurality of blades, with the said blades connected to the rotor, and which said engine assembly is able to rotate the said rotor, with the blades connected to the rotor such that when the rotor is rotated by the said engine assembly
5 air can be forced in a downward direction by means of the blades rotating around the rotor, with the primary lifting mechanism able to exert an upward force on the forward end of the main body of the aircraft by forcing air in a downward direction by way of the blades rotating
10 around the rotor,
and which primary lifting mechanism is connected to the main body of the aircraft by a tilt enabling joint such that during flight of the aircraft the primary lifting mechanism can be tilted in a plurality of directions and angles relative
15 to the main body of the aircraft, in a controlled manner, and such that the primary lifting mechanism can be tilted in forward, rearward and lateral directions relative to the main body of the aircraft during flight of the aircraft, in a controlled manner, and such that a direction of
20 travel of the aircraft during flight can be altered by altering the lateral direction or angle of tilt of the primary lifting mechanism relative to the main body of the aircraft, and which said tilt enabling joint is a primary tilt enabling joint, with the primary lifting mechanism able to exert an
25 upward force on the forward end of the main body of the aircraft through the primary tilt enabling joint, and which

secondary lifting mechanism is connected to the main body of the aircraft by an additional tilt enabling joint, which said additional tilt enabling joint is a secondary tilt enabling joint, and which said secondary lifting mechanism is

5 connected to the main body of the aircraft by the secondary tilt enabling joint such that during flight of the aircraft the secondary lifting mechanism can be tilted in a plurality of directions and angles relative to the main body of the aircraft, in a controlled manner, and such that the secondary

10 lifting mechanism can be tilted in forward, rearward and lateral directions relative to the main body during flight of the aircraft, in a controlled manner, and such that a direction of travel of the aircraft during flight can be altered by altering the lateral direction or

15 angle of tilt of the secondary lifting mechanism relative to the main body, and which secondary tilt enabling joint is such that the secondary lifting mechanism can be tilted in a controlled manner in a lateral direction with respect to the main body of the aircraft during flight of the aircraft that

20 is opposite to a lateral direction that the primary lifting mechanism can be tilted in with respect to the main body of the aircraft by means of the primary tilt enabling joint during flight of the aircraft,

and the secondary lifting

25 mechanism is a turboprop, which secondary lifting mechanism is attached to the secondary tilt enabling joint such

that air can be forced in a downward direction by the secondary lifting mechanism, and such that by forcing air in a downward direction the secondary lifting mechanism is able to exert an upward force on the aft end of the main body of the aircraft, and which secondary lifting mechanism is able to exert an upward force on the aft end of the main body of the aircraft through the secondary tilt enabling joint, with the primary tilt enabling joint and the secondary tilt enabling joint connected to the main body of the aircraft, and with the aircraft able to achieve flight by means of an upward force exerted on the main body of the aircraft by the primary lifting mechanism forcing air in a downward direction and an upward force exerted on the main body of the aircraft by the secondary lifting mechanism forcing air in a downward direction while the primary lifting mechanism and the secondary lifting mechanism are maintained in tandem order, and with controlled lateral tilting of the primary lifting mechanism and the secondary lifting mechanism able to occur during flight while the primary lifting mechanism and the secondary lifting mechanism are maintained in tandem order.

12. An aircraft with a main body, a primary lifting mechanism and a secondary lifting mechanism, which main body has a forward end and an aft end, with the primary lifting mechanism and the secondary lifting mechanism connected to the main body of the aircraft in tandem order, and with the aircraft able to achieve flight by means of upward forces exerted on the main body of the aircraft by the primary lifting mechanism and the secondary lifting mechanism while the primary lifting mechanism and the secondary lifting mechanism are connected to the main body of the aircraft in tandem order,
- and which primary lifting mechanism is connected to the main body of the aircraft by a tilt enabling joint such that during flight of the aircraft the primary lifting mechanism can be tilted in a plurality of directions and angles relative to the main body of the aircraft, in a controlled manner, and such that the primary lifting mechanism can be tilted in forward, rearward and lateral directions relative to the main body of the aircraft during flight of the aircraft, in a controlled manner, and such that a direction of travel of the aircraft during flight can be altered by altering the lateral direction or angle of tilt of the primary lifting mechanism relative to the main body of the aircraft, and which said tilt enabling joint is a primary tilt enabling joint,
- which primary lifting mechanism is a turboprop, and which primary lifting mechanism is

attached to the primary tilt enabling joint such that air
can be forced in a downward direction by the primary
lifting mechanism, and such that by forcing air in a
downward direction the primary lifting mechanism is able
5 to exert an upward force on the forward end of the main
body of the aircraft, with the primary lifting mechanism
able to exert an upward force on the forward end of the main
body of the aircraft through the primary tilt enabling joint,
and which secondary lifting mechanism is
10 connected to the main body of the aircraft by an additional
tilt enabling joint, which said additional tilt enabling
joint is a secondary tilt enabling
joint, and which said secondary lifting mechanism is
connected to the main body of the aircraft by the secondary
15 tilt enabling joint such that during flight of the aircraft
the secondary lifting mechanism can be tilted in a plurality
of directions and angles relative to the main body of the
aircraft, in a controlled manner, and such that the secondary
lifting mechanism can be tilted in forward, rearward and
20 lateral directions relative to the main body during flight
of the aircraft, in a controlled manner, and
such that a direction of travel of the aircraft during
flight can be altered by altering the lateral direction or
angle of tilt of the secondary lifting mechanism relative
25 to the main body, and which secondary tilt enabling joint is
such that the secondary lifting mechanism can be tilted in a

controlled manner in a lateral direction with respect to the main body of the aircraft during flight of the aircraft that is opposite to a lateral direction that the primary lifting mechanism can be tilted in with respect to the main body of the aircraft by means of the primary tilt enabling joint during flight of the aircraft,

and which secondary lifting mechanism comprises a rotor, an engine assembly, and a plurality of blades, with the blades of the secondary lifting mechanism connected to the rotor of the secondary lifting mechanism, and which engine assembly of the secondary lifting mechanism is able to rotate the rotor of the secondary lifting mechanism, with the blades of the secondary lifting mechanism connected to the rotor of the secondary lifting mechanism such that when the rotor of the secondary lifting mechanism is rotated by the engine assembly of the secondary lifting mechanism air can be forced in a downward direction by means of the blades of the secondary lifting mechanism rotating around the rotor of the secondary lifting mechanism, with the secondary lifting mechanism able to exert an upward force on the aft end of the main body of the aircraft by forcing air in a downward direction by way of the blades of the secondary lifting mechanism rotating around the rotor of the secondary lifting mechanism, and which secondary lifting

mechanism is able to exert an upward force on the aft end of the main body of the aircraft through the secondary tilt enabling joint, with the primary tilt enabling joint and the secondary tilt enabling joint connected to the main body of the aircraft, and with the aircraft able to achieve flight by means of an upward force exerted on the main body of the aircraft by the primary lifting mechanism forcing air in a downward direction and an upward force exerted on the main body of the aircraft by the secondary lifting mechanism forcing air in a downward direction while the primary lifting mechanism and the secondary lifting mechanism are maintained in tandem order, and with controlled lateral tilting of the primary lifting mechanism and the secondary lifting mechanism able to occur during flight while the primary lifting mechanism and the secondary lifting mechanism are maintained in tandem order.

13. The aircraft of claim 2 wherein the engine assembly of the primary lifting mechanism comprises a single engine and the engine assembly of the secondary lifting mechanism comprises a single engine.

14. The aircraft of claim 2 wherein the engine assembly of the primary lifting mechanism comprises a plurality of engines and the engine assembly of the secondary lifting mechanism comprises a single engine.

15. The aircraft of claim 2 wherein the engine assembly of the primary lifting mechanism comprises a single engine and the engine assembly of the secondary lifting mechanism comprises a plurality of engines.
- 5 16. The aircraft of claim 2 wherein the engine assembly of the primary lifting mechanism comprises a plurality of engines and the engine assembly of the secondary lifting mechanism comprises a plurality of engines.
- 10 17. The aircraft of claim 4 wherein the engine assembly of the primary lifting mechanism comprises a single engine.
18. The aircraft of claim 4 wherein the engine assembly of the primary lifting mechanism comprises a plurality of engines.
19. The aircraft of claim 11 wherein the engine assembly of the primary lifting mechanism comprises a single engine.
- 15 20. The aircraft of claim 11 wherein the engine assembly of the primary lifting mechanism comprises a plurality of engines.
21. The aircraft of claim 12 wherein the engine assembly of the secondary lifting mechanism comprises a single engine.
22. The aircraft of claim 12 wherein the engine assembly of the secondary lifting mechanism comprises a plurality of engines.
- 20

23. The aircraft of any one of claims 1 to 22 wherein
the primary lifting mechanism and the secondary lifting
mechanism are connected to the main body of the aircraft
such that the primary lifting mechanism is further forward
5 with respect to the main body of the aircraft than is the
position of the secondary lifting mechanism with respect to
the main body of the aircraft.
24. The aircraft of any one of claims 1 to 23 wherein
the primary lifting mechanism is connected to the main body
10 of the aircraft by means of the primary tilt enabling joint
such that the primary lifting mechanism can be tilted in a
forward direction and a rearward direction relative to the
main body of the aircraft, in a controlled manner, by means
of the primary tilt enabling joint.
- 15 25. The aircraft of any one of claims 1 to 24 wherein the
secondary lifting mechanism is connected to the main body
of the aircraft by means of the secondary tilt enabling
joint such that the secondary lifting mechanism can be
tilted in a forward and a rearward direction relative to the
20 main body of the aircraft, in a controlled manner, by means
of the secondary tilt enabling joint.

26. The aircraft of any one of claims 1 to 25 wherein
the primary lifting mechanism is connected to the main body
by the primary tilt enabling joint such that the primary
lifting mechanism can be positioned above the main body of
the aircraft by means of the primary tilt enabling joint
during flight of the aircraft.
27. The aircraft of any one of claims 1 to 25 wherein
the primary lifting mechanism is connected to the main body
of the aircraft by the primary tilt enabling joint such that
only a part of the primary lifting mechanism can be positioned
above the main body of the aircraft by means of the primary
tilt enabling joint during flight of the aircraft.
28. The aircraft of any one of claims 1 to 27 wherein
the primary lifting mechanism is connected to the main body
of the aircraft by the primary tilt enabling joint such that
the primary lifting mechanism can be positioned in front of
the main body of the aircraft by means of the primary tilt
enabling joint during flight of the aircraft.
29. The aircraft of any one of claims 1 to 27 wherein
the primary lifting mechanism is connected to the main body
of the aircraft by the primary tilt enabling joint such that
only a part of the primary lifting mechanism can be positioned
in front of the main body of the aircraft by means of the
primary tilt enabling joint during flight of the aircraft.

30. The aircraft of any one of claims 1 to 27 wherein
by means of the primary tilt enabling joint the primary
lifting mechanism can be placed in a position such that no
part of the primary lifting mechanism is in front of the
5 main body of the aircraft.
31. The aircraft of any one of claims 1 to 30 wherein the
secondary lifting mechanism is connected to the main body of
the aircraft by the secondary tilt enabling joint such that the
secondary lifting mechanism can be positioned above the aft
10 end of the main body of the aircraft by means of the
secondary tilt enabling joint during flight of the aircraft.
32. The aircraft of any one of claims 1 to 30 wherein
the secondary lifting mechanism is connected to the main body
of the aircraft by the secondary tilt enabling joint such
15 that only a part of the secondary lifting mechanism can
be positioned above the main body of the aircraft by means of
the secondary tilt enabling joint during flight of the aircraft.
33. The aircraft of any one of claims 1 to 32 wherein
the secondary lifting mechanism is connected to the main body
20 of the aircraft by the secondary tilt enabling joint such that
the secondary lifting mechanism can be positioned behind the
main body of the aircraft by means of the secondary tilt
enabling joint during flight of the aircraft.

34. The aircraft of any one of claims 1 to 32 wherein
the secondary lifting mechanism is connected to the main body
of the aircraft by the secondary tilt enabling joint such that
only a part the secondary lifting mechanism can be positioned
5 behind the main body of the aircraft by means of the secondary
tilt enabling joint during flight of the aircraft.

35. The aircraft of any one of claims 1 to 32 wherein
by means of the secondary tilt enabling joint the secondary
lifting mechanism can be placed in a position such that no
10 part of the secondary lifting mechanism is in behind of the
main body of the aircraft.

36. The aircraft of any one of claims 1 to 35 wherein
the primary tilt enabling joint comprises a movement enabling
assembly that enables the primary tilt enabling joint to
15 move and a tilt activating mechanism that can cause and
control the movement of the primary tilt enabling joint,
and the secondary tilt enabling joint comprises a movement
enabling assembly that allows the secondary tilt enabling
joint to move and a tilt activating mechanism that causes
20 and controls the movement of the secondary tilt enabling
joint to occur, which movement enabling assembly of the
secondary tilt enabling joint is a secondary movement
enabling assembly, and which said tilt activating mechanism
of the secondary tilt enabling joint is a secondary tilt
25 activating mechanism.

37. The aircraft of claim of 36 wherein the movement enabling assembly of the primary tilt enabling joint is a universal joint and the tilt activating mechanism of the primary tilt enabling joint comprises as plurality of hydraulic actuators connected to the universal joint of the primary tilt enabling joint.

38. The aircraft of claim of 36 wherein the movement enabling assembly of the primary tilt enabling joint comprises a plurality of hinges transversely connected to one another and the tilt activating mechanism of the primary tilt enabling joint comprises as plurality of hydraulic actuators connected to the movement enabling assembly of the primary tilt enabling joint.

39. The aircraft of any one of claims 1 to 38 wherein the movement enabling assembly of the secondary tilt enabling joint is a universal joint, with the tilt activating mechanism of the secondary tilt enabling joint comprising a plurality of hydraulic actuators connected to the universal joint of the secondary tilt enabling joint.

40. The aircraft of any one of claims 1 to 38 wherein
the movement enabling assembly of the secondary tilt
enabling joint comprises a plurality of hinges transversely
connected to one another with the tilt activating mechanism
5 of the secondary tilt enabling joint comprising a plurality
of hydraulic actuators connected to the movement enabling
assembly of the secondary tilt enabling joint.
41. The aircraft of any one of claims 1 to 35 wherein
the primary tilt enabling joint comprises a plurality of
10 movement enabling assemblies that enable the primary tilt
enabling joint to have a tilt motion and a plurality of tilt
activating mechanisms that can cause and control the movement
of the primary tilt enabling joint, and the secondary tilt
enabling joint comprises a plurality of movement enabling
15 assemblies that allow the secondary tilt enabling joint to
move and a plurality of tilt activating mechanisms that can
cause and control the movement of the secondary tilt enabling
joint.
42. The aircraft of any one of claims 1 to 41 wherein
20 the secondary lifting mechanism is connected to the
the secondary tilt enabling joint by a rotating mechanism
such that during flight of the aircraft the secondary lifting
mechanism can be rotated in a controlled manner relative to
the secondary tilt enabling joint by means of the rotating
25 mechanism.

43. The aircraft of any one of claims 1 to 41 wherein
the secondary tilt enabling joint is connected to the main
body of the aircraft by a rotating mechanism such that during
flight of the aircraft the secondary tilt enabling joint can
5 be rotated relative to the main body of the aircraft in a
controlled manner by means of the rotating mechanism.
44. The aircraft of any one of claims 4, 5, 6, 8, 9 or 10 wherein
a fin is connected to the secondary lifting mechanism such that
the fin protrudes outward from the secondary lifting mechanism.
- 10 45. The aircraft of any one of claims 1 to 44 wherein the primary
tilt enabling joint is connected to the main body of the
aircraft by a tilt enabling joint, which said tilt enabling
joint that connects the primary tilt enabling joint to the
main body is a third tilt enabling joint, and which said
15 third tilt enabling joint is such that the primary tilt
enabling joint can be tilted in a plurality of directions
and angles relative to the main body of the aircraft, in a
controlled manner, by means of the third tilt enabling joint.
46. The aircraft of claim 45 wherein the third tilt enabling
20 joint is such that the primary tilt enabling joint
can be tilted in a plurality of directions and angles
relative to the main body of the aircraft, in a controlled
manner, by means of the third tilt enabling joint without
components of the primary tilt enabling joint having to move
25 with respect to one another.

47. The aircraft of any one of claims 45 or 46 wherein
the third tilt enabling joint comprises a movement enabling
assembly that enables the third tilt enabling joint to move
and a tilt activating mechanism that can cause and control
5 the movement of the third tilt enabling joint.

48. The aircraft of claim 47 wherein the
movement enabling assembly of the third tilt enabling joint
comprises a universal joint and the tilt activating
comprises a plurality of hydraulic actuators.